I. AMENDMENTS

Please amend Claims 1-9, and add Claims 10 and 11, as set out below.

1. **(currently amended)** A method of using long range guided wave inspection techniques to detect ~~defects and~~ geometric ~~features~~ **irregularities** in a structure, comprising the steps of:

generating a first long range wave from a probe at a first probe position;

acquiring a first **data** set **representing** ~~of~~ reflection signals **reflected from an irregularity to the** ~~from a~~ first probe ~~position~~;

generating a second long range wave from a probe at a second probe position having a known separation from the first probe position;

acquiring a second **data** set **representing** ~~of~~ reflection signals **reflected from the irregularity to the** ~~from a~~ second probe position ~~having a known separation from the first probe position~~;

identifying ~~signals in both sets of data whose amplitude exceeds a threshold value~~ **peak signal values in the first data set and in the second data set, thereby obtaining a first set of peak signal values and a second set of peak signal values; associating each peak signal value with an occurance time;**

time-shifting ~~the identified signals in one set of data~~ **one set of peak signal values** by an amount that would cause the **reflection** signals to ~~occur~~ **be received** at the same time if the probes were in the same position;

determining ~~a~~ coincidence in time of ~~the identified signals in both data sets~~ **values in the shifted set of peak signal values and values in the unshifted set of peak signal values**; and

interpreting coincident ~~signals~~ **values** as corresponding to ~~defects and geometric features~~ **an irregularity** in the structure **along the shared path of the first and second long range waves**.

2. (**currently amended**) The method of Claim 1, wherein the ~~data~~ **first data set and the second data set** are in the time domain.

3. (**currently amended**) The method of Claim 2, wherein the ~~data are~~ **first data set and the second data set represent** A-scan data.

4. (**currently amended**) The method of Claim 1, wherein the ~~data~~ **first data set and the second data set** are in the frequency domain.

5. (**currently amended**) The method of Claim 4, further comprising the step of converting the ~~data~~ **first data set and the second data set** to time domain data before performing the identifying step.

6. (**currently amended**) The method of Claim 1, wherein the identifying step is performed by defining a gate length~~,~~ ~~incrementing the data values by the gate length,~~ and ~~within each gate length~~ selecting a maximum signal value **within each of a series of gate lengths**.

7. **(currently amended)** The method of Claim 1, wherein the determining step is performed by defining a time limit within which ~~two signals~~ **both a value in the shifted set of peak signal values and a value in the unshifted set of peak signal values** must occur.

8. **(currently amended)** The method of Claim 1, wherein the ~~determining step is performed by comparing]~~ occurrence time**s correspond** to ~~of~~ peak signal values ~~within each gate~~.

9. **(currently amended)** The method of Claim 1, wherein the ~~determining step is performed by comparing average~~ occurrence times ~~of values exceeding the threshold within each gate~~ **are determined by the median time during which data values exceed a threshold**.

10. **(new) The method of Claim 1, wherein the probes are suitable for magnetostrictive testing.**

11. **(new) The method of Claim 1, wherein the probes are suitable for Lamb wave testing.**

II. REMARKS

This Application has been carefully reviewed in light of the Office Action mailed January 10, 2003. At the time of the Office Action, Claims 1-9 were pending in this Application.

Rejections under 35 U.S.C. § 112

Claims 1-9 were rejected by the Examiner under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to